

Rapid Ammunition Planning Tool and Optimization Routine (RAPTOR)

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A new decision-aid tool will help the Project Manager for Combat Ammunition Systems (PM CAS) develop an overall ammunition strategy road map to ensure that the Army always has the necessary artillery and mortar ammunition on hand to accomplish its portion of the National Military Strategy. Called the Combat Ammunition Plan (CAP), it was developed by the Altarum Institute, a nonprofit organization located in Ann Arbor, MI.

To generate the CAP, the Altarum team developed a software module called the RAPTOR. RAPTOR will take diverse inputs, such as existing program status, budgets, stockpile levels, warfighting and training needs, warfighting analysis and industrial base capability, science

and technology objectives (STOs), independent research and development, manufacturing technology and Small Business Innovation Research Program initiatives and determine the optimal time-phased strategy for managing the life cycle of artillery and mortar ammunition as depicted in the figure below.

RAPTOR will also generate time-phased acquisition options that will enable the Army, given available resources, to acquire ammunition at a rate that will come as close as possible to achieving the levels of ammunition needed to satisfy training and stockpile requirements, while also ensuring optimal force effectiveness.

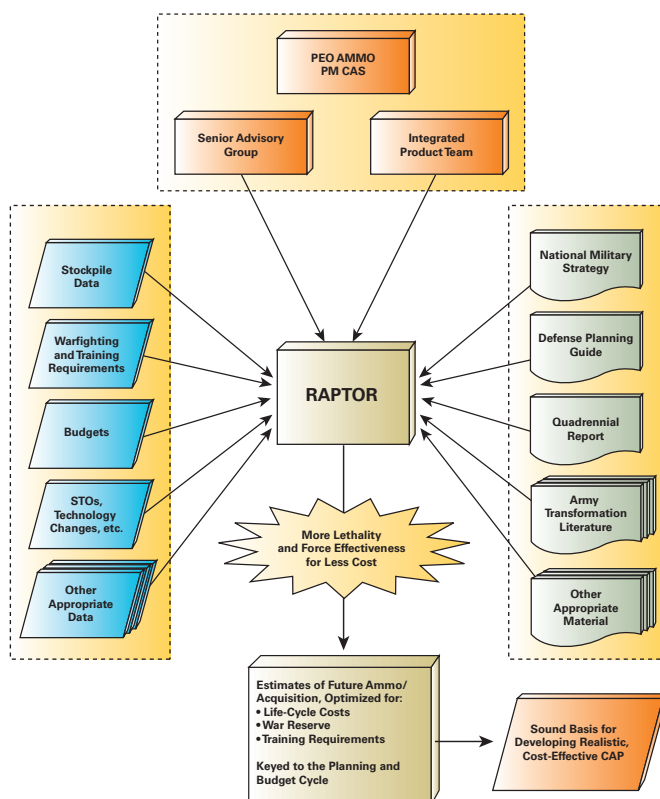
Fast, flexible and designed to accommodate the dynamic DOD planning

and budget environment, RAPTOR will allow PM CAS to quickly calculate an optimal CAP that reflects any changes in the planning environment whenever parameter values change. RAPTOR will also identify stockpile shortfalls and excesses.

To ensure customer satisfaction and acceptance, RAPTOR is being developed under the guidance of a senior advisory group and an integrated product team, co-chaired by Program Executive Office for Ammunition and PM CAS.

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RAPTOR uses diverse inputs to determine the optimal time-phased strategy for life-cycle management of artillery and mortar ammunition.

